"Express Mail" Label No. EX 325766564US Attorney Docket No.: 000939-052180US Date of Deposit

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Address" service under 37 CFR 1.10 on the date indicated above and is addressed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Harold S. Crafts

Application No.: Not Yet Assigned

Filed:

For: SEA-OF-CELLS ARRAY OF

**TRANSISTORS** 

Examiner:

Art Unit:

INFORMATION DISCLOSURE

STATEMENT UNDER 37 CFR §1.97 and

§1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Applicants also wish to make the Examiner aware of the following co-pending patent applications:

U.S. Patent Application No. 10/125,925

Inventor: Crafts, H.S.

Filing Date: April 19, 2002

Harold S. Crafts

Application No.: Not Yet Assigned

Page 2

U.S. Patent Application No. 10/463,160

Inventor: Crafts, H.S. Filing Date: June 16, 2003

U.S. Patent Application No. 10/601,351

Inventor: Crafts, H.S.

Filing Date: June 23, 2003

To comply with 37 CFR §1.98(a)(2)(iii), enclosed are the specifications, claims and drawings for the above applications.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that <u>no fee is required</u> for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Willing Wohan

William F. Vobach Reg. No. 39,411

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, 8<sup>th</sup> Floor San Francisco, California 94111-3834

Tel: 303-571-4000 Fax: 303-571-4321

CEK:nmb 60051493 v1

Substitute for form 1449A/PTO	Complete if Known			
	Application Number	Not Yet Assigned		
INFORMATION DISCLOSURE	Filing Date			
STATEMENT BY APPLICANT	First Named Inventor	Crafts, Harold S.		
	Art Unit			
(use as many sheets as necessary)	Examiner Name			
Sheet 2 of 3	Attorney Docket Number	000939-052180US		

Document Number  Number Kind Code <sup>2</sup> (if known)  US-3,461,361  US-4,143,178  US-4,151,635  US-4,229,756  US-4,244,001  US-4,317,690  US-4,525,809	Publication Date MM-DD-YYYY 08/01/1969 03/06/1979 05/01/1979 10/21/1980 01/06/1981	Name of Patentee or Applicant of Cited Document  Delivorias  Harada et al.  Kashkooli et al.	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
US-3,461,361 US-4,143,178 US-4,151,635 US-4,229,756 US-4,244,001 US-4,317,690	08/01/1969 03/06/1979 05/01/1979 10/21/1980 01/06/1981	Applicant of Cited Document  Delivorias  Harada et al.  Kashkooli et al.	Relevant Passages or Relevant
US-4,143,178 US-4,151,635 US-4,229,756 US-4,244,001 US-4,317,690	03/06/1979 05/01/1979 10/21/1980 01/06/1981	Harada et al. Kashkooli et al.	
US-4,151,635 US-4,229,756 US-4,244,001 US-4,317,690	05/01/1979 10/21/1980 01/06/1981	Kashkooli et al.	
US-4,229,756 US-4,244,001 US-4,317,690	10/21/1980 01/06/1981		
US-4,244,001 US-4,317,690	01/06/1981		
US-4,317,690		Sata et al.	
<u> </u>	·	Alfred C. Ipri	
<u> </u>	03/02/1982	Koomen et al.	
	06/25/1985	Chiba et al.	
US-4,584,653	04/22/1986	Chih et al.	
US-4,593,205	06/03/1986	Bass et al.	
US-4,630,219	12/16/1986	DiGiacomo et al.	
US-4,638,458	01/20/1987	Yasuo Itoh	
US-4,682,202	07/21/1987	Tetsu Tanizawa	
US-4,686,758	08/18/1987	Liu et al.	
US-4,701,642	10/20/1987	Wilbur D. Pricer	
US-4,742,383	05/03/1988	Joseph M. Fitzgerald	
US-4,845,544	07/04/1989	Shinji Shimizu	<del></del>
US-4,849,344	07/18/1989	Desbiens et al.	
US-4,905,073	02/27/1990	Chen et al.	
US-4,989,062	01/29/1991	Takahashi et al.	
US-4,999,518	03/12/1991	Dhong et al.	
US-5,003,199	03/26/1991	Chuang et al.	
US-5,008,208	04/16/1991	Liu et al.	
US-5,013,679	05/07/1991	Kumagai et al.	<del></del>
US-5.032.530	07/16/1991	Lowrey et al.	
US-5,037,766	08/06/1991	Ting S. Wang	
US-5,045,726	09/03/1991	Raymond T. Leung	
US-5,049,515	09/17/1991	Jhy-cherng J. Tzeng	
US-5,081,518	01/14/1992	El-Diwany et al.	•
	06/23/1992	Tanizawa et al.	
<del></del>			
<u> </u>			
<del></del>			
		· <del> </del>	
<del> </del>			
<del>                                     </del>			
<del> </del>			
<del>                                       </del>		<del></del>	
	US-5,124,776 US-5,126,279 US-5,162,884 US-5,168,072 US-5,175,118 US-5,225,991 US-5,286,518 US-5,294,822 US-5,296,755 US-5,298,805 US-5,313,079 US-5,313,101 US-5,314,832	US-5,126,279 06/30/1992 US-5,162,884 11/10/1992 US-5,168,072 12/01/1992 US-5,175,118 12/29/1992 US-5,225,991 07/06/1993 US-5,286,518 02/15/1994 US-5,294,822 03/15/1994 US-5,296,755 03/22/1994 US-5,298,805 03/29/1994 US-5,313,079 05/17/1994	US-5,126,279 06/30/1992 Gregory N. Roberts US-5,162,884 11/10/1992 Liou et al. US-5,168,072 12/01/1992 Mehrdad M. Moslehi US-5,175,118 12/29/1992 Masahiro Yoneda US-5,225,991 07/06/1993 Dougherty US-5,286,518 02/15/1994 Cain et al. US-5,294,822 03/15/1994 Douglas P. Verrett US-5,296,755 03/22/1994 Miyamoto et al. US-5,298,805 03/29/1994 Garverick et al. US-5,313,079 05/17/1994 Brasen et al. US-5,313,101 05/17/1994 Harada et al.

Examiner Signature	Date Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 

Applicant's unique citation designation number (optional). 

Kind Codes of U.S. Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. 

Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 

Applicant is to place a check mark here if English language Translation is attached. 

60051493 v1

Substitute for form 1449A/PTO				Complete if Known	`
			Application Number	Not Yet Assigned	
INFO	RMATION	DISCLOSURE	Filing Date		
STA	STATEMENT BY APPLICANT		First Named Inventor	Crafts, Harold S.	
			Art Unit		
	(use as many she	eets as necessary)	Examiner Name		
Sheet	2	of 3	Attorney Docket Number	000939-052180US	
	•	•	•	•	

	U.S. PATENT DOCUMENTS+							
	Document Number							
Examiner Initials*	Cite No. <sup>1</sup>	Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
_	A42	US-5,341,049	08/23/1994	Shimizu et al.				
	A43	US-5,342,794	08/30/1994	Wei, Yi-Hen				
•	A44	US-5,388,055	02/07/1995	Tanizawa et al.				
	A45	US-5,410,173	04/25/1995	Kikushima et al.				
	A46	US-5,432,707	07/11/1995	Leung				
	A47	US-5,444,285	08/22/1995	Robinson et al.				
	A48	US-5,452,245	09/19/1995	Hickman et al.				
	A49	US-5,539,224	07/01/1996	Ema				
	A50	US-5,541,120	07/30/1996	Robinson et al.	· · · <del>-</del>			
	A51	US-5,654,898	08/05/1997	Roetcisoender et al.				
	A52	US-5,671,397	09/23/1997	Crafts				
	A53	US-5,869,900	02/09/1999	Crafts				
	A54	US-6,269,466	07/31/2001	Crafts				
	A55	US-6,489,641	12/03/2002	Crafts				
	A56	US-6,605,499	08/12/2003	Crafts				

	FOREIGN PATENT DOCUMENTS							
Examiner	Cite	Fore	eign Patent Doo	cument	Dublication Data	Name of Patentee or	Pages, Columns, Lines, Where Relevant	
Initials*	No.1	Country Code <sup>3</sup>	Number⁴	Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T⁵
	C1							
	C2							
	C3							

Examiner Signature	Date Considered	

Complete if Known		
Application Number	Not Yet Assigned	
Filing Date		
First Named Inventor	Crafts, Harold S.	
Art Unit		
Examiner Name		
Attorney Docket Number	000939-052180US	
	Application Number Filing Date First Named Inventor Art Unit Examiner Name	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
	C1	BACHELU et al. "A Study of the Use of Local Interconnect in CMOS Leaf Cell Design," IEEE, 1993, pp. 566-570	
	C2	BACHELU et al. "A Study of the Use of Local Interconnect in CMOS Leaf Cell Design," IEEE, pp. 1258-1261, 1992	
	СЗ	BARTELINK et al. "Interconnect for Submicron ASICS," IEEE, 1989, pp. 59-62	
- <del></del>	C4	CHANG, M. & CHEN, C. "PROMPT3 - A cell-Based Transistor Sizing Program Using Heuristic and Simulated Annealing Algorithms." <i>IEEE</i> , 1989, pp. 17.2.1-17.2.4.	
	C5	FELDMAN, J. et al. "An Efficient Algorithm for some Multirow Layout Problems", <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits &amp; Systems</i> , August 1993, pp. 1178-1185, Vol. 12, No. 8.	
· · ·	C6	HSIEH et al. "Size Optimization for CMOS Basic Cells of VLSI", IEEE, pp. 2180-2183	
	C7	KAWASAKI, H. et al. "10K-Gate GaAs JFET Sea of Gates", IEEE Journal of Solid-State Circuits, October 1991; pp. 1367-1370, Vol. 26, No. 10.	
	C8	KORTE, B. et al. "A Design-System for ASIC's with Macrocells", IEEE, Euro ASIC '90; 1990; pp. 220-224.	
	C9	KORTE, B. et al. "Combining Partitioning and Global Routing in a Sea-of-Cells Design", IEEE Computer-Aided Design, 1989 International Conference; pp. 98-101	
	C10	MADIHIAN, M. et al. "Application of AlGaAs/GaAs HBT's to High-Speed CML Logic Family Fabrication", <i>IEEE Transactions on Electron Devices</i> , April 1989; pp. 625-631, Vol. 36, No. 4.	
·	C11	PANNER, J. et al. "A Comprehensive CAD System for High-Performance 300K-Circuit ASIC Logic Chips", <i>IEEE Journal of Solid-State Circuits</i> , March 1991, pp. 300-309, Vol. 26, No. 3.	
	C12	PERELLO et al. "Dependence of Spice level 3 Model Parameters with tRansistor Size", IEEE, pp. 84-89.	
	C13	SHICHIJO, H. et al. "GaAs MESFET and Si CMOS Cointegration and Circuit Techniques", <i>IEEE</i> , <i>GaAs IC Symposium</i> , September 1988; pp. 239-242.	
	C14	STOOPS, E.H., Structured Macro, IBM Technical Dislosure Bulletin, September 1982, Vol. 25, No. 4	

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.